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- Meyer, O.*—Observation on the Tertiary and Grand Gulf of Mississippi. Ext. Am. Jour. Science, July, 1886.
- Meyer, O., and Aldrich, T. H.*—The Tertiary fauna of Newton and Wautubbee, Miss. Ext. Cincin. Soc. Nat. Hist., 1886.
- Renevier, E.*—Rapport sur la Marche de Musée Géologique Vaudois en 1885. From the author.
- Dobson, G. E.*—Note on the mandibular dentition of the shrews. Ext. Jour. Anat. and Phys., Vol. xx.
- Frazer, P.*—General notes on the geology of York county, Pa., 1886.
- The application of composite photography to hand-writing and especially to signatures. 1886. Both from the author.
- Beyer, H. G.*—A study of the structure of *Lingula (Glottidia) pyramidata* Stim. (Dall). From the author.
- Gill, T.*—An account of the progress of geology in the year 1885. From the author.
- Mackay, A. H.*—Notes on the fresh-water sponges of Nova Scotia. 1886. From the author.
- McConnell, R. G.*—Geological and topographical map of the Cypress hills, Wood mountain and adjacent country. From A. R. C. Selwyn.
- Holbrook, M. L.*—Studies of the development of the cartilage in the embryo of the chick and man.
- First development of the muscle in the embryo of the chick and man. Both Rep. Proc. Soc. Amer. Micros., 1885. Both from the author.
- Merriam, C. H.*—Description of a new species of Aplodontia (*A. major*). Ext. Ann. N. Y. Acad. Sci.
- Description of a newly-born lynx. Both from the author.
- Marcou, J. B.*—Annotated catalogue of the published writings of C. A. White. 1885.

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## GENERAL NOTES.

### GEOGRAPHY AND TRAVELS.<sup>1</sup>

ASIA.—*The Aralo-Caspian basin.*—M. Moushketoff believes that the Amu-daria may once have joined the Sir-daria before entering the basin of the Aral and Sary-kamysh lakes; but later on the Amu entered the Sary-kamysh or western part of the double lake, while the Sir-daria flowed into the Aral part. Gradually the Amu, as appears by the orography of the region, undermined the Sultan-uiz-dagh hills, and finally, finding its way through them, entered the Aral. The Sary-kamysh, deprived of its water, rapidly dried up. The bed of this lake is fifty feet below that of the Caspian, and covers a surface of 4400 square miles. The Aral is now also rapidly receding. The Albughir gulf has disappeared, the Sary-cheganak gulf is converted into a lake as is also the Kamyshlybash, which the Kirghis remember to have been connected with the Aral. The evaporation at Astrakhan exceeds the rainfall by five times, at Tashkend by three times, while at Nukus it is twenty-seven and at Petro-Alexandrovsk thirty-six times the rainfall. The Uzboy is, by M. Moushketoff, believed to be a marine outlet which connected the Caspian and

<sup>1</sup> This department is edited by W. N. LOCKINGTON, Philadelphia.

Aral basins; it has no river deposits, and Caspian shells extend far up it. Our author classes the sandhills into dunes—river dunes and lake dunes, formed by the combined action of wind and water, and *barkhans*, formed by wind only, and always crescentic or hoof-shaped.

*Asiatic News.*—The curious and almost inaccessible country of Dardistan and Shinoki, on the Upper Indus, peopled by Aryans who have embraced Sunni Mahommedanism, was traversed in various directions by Ahmad Ali, a sub-surveyor. His laborious journey is described in the Annual Report of the Indian Survey for 1883-'84, but scarcely, according to the Marquis of Lorne, with the prominence it deserves.—Although M. Needham met with no rivers answering to the Sanpo in his recent journey to Rima, so that it seems almost certain that the Sanpo must turn south much farther to the west, must, in fact, be the Dihong branch of the Brahmaputra, the question is not yet settled by actual exploration. The Dihong, at the highest point reached, flows through precipitous gorges in one of the most rugged countries of the world, peopled by fierce and independent mountain tribes.—The Indian Survey Report for 1883-'4 contains a detailed account, with map, of Lake Palti or Yamdok-cho (said to be ring-shaped with a central island), in Southern Thibet. The agent of the survey has made a complete circuit of the lake, and has proved that the supposed central island is a peninsula, separating two bays. Yamdok-cho means scorpion, and these two bays form the claws. The lake lies on the road between Shigatze and Lhasa, at an altitude of 13,800 feet. It is embosomed by mountains except at its eastern extremity, where the heights die away into a verdant plain, on which thousands of cattle and horses graze. Villages and monasteries are dotted around the small bays of the shores.—Explorations in the Himalayas have brought to light the large Lhobra river, which has been traced to within a day's march of the Bhotan frontier. A native surveyor completed the circuit of Kinchinjinga, so that the boundary between Northeastern Nepal and Thibet can now be delineated.—Dr. Gottsche, who on behalf of the Japanese government has traveled widely over Corea, visiting eighty of the 350 district towns, states that granite, gneiss and crystalline schists are predominant in the geology of the peninsula. Here and there they are broken by the older volcanic formations. Palæozoic strata occur rarely, and the later sedimentary formations not at all (?). The only metal in which Corea is rich, is iron. The fauna is extensive and interesting from the fact that palæartic and sub-tropical types meet here.—From a communication by M. Nikolsky to the St. Petersburg Society of Naturalists, it appears that Lake Balkash is drying up, the lowering of the level amounting to two feet in ten years. Maps of 1852 prove that since that time a great reduction of surface has taken place. The

fauna of this lake does not include a single species of fish which characterizes the Aralo-Caspian region; while there is great resemblance between the fishes of Lake Balkash and those of the high plateau of Central Asia. There was certainly, in recent geological times, a connection between the rivers of the Balkash basin and those of the Lob-nor basin.

AMERICA.—*American News*.—Mr. Whitely has ascended Tweekway, a table-topped mountain in Guiana, situated about fifty miles N.N.W. of the now celebrated Roraima on the southern bank of the Carimang river, below its junction with the Araima. The mountain is not so high as Roraima but similar in form, with vertical walls and a long sloping talus uniting the cliff to the savanna country below. Unlike Roraima it is wooded at the summit, the foot-slope at one part gives easy access to the top, and the water which falls upon it instead of falling in cascades over the edge of the plateau, drains off by a cavity of great depth in its center.—Petermann's *Mittheilungen* publishes an account of the exploration of Dr. F. Boas in Baffin land in 1883-4. The object of the expedition was mainly ethnographical, but the extensive sledge journeys taken along the coast have enabled him to add considerably to our knowledge of the configuration of the coasts of Cumberland sound and Northeastern Baffin land. Important alterations will have to be made on existing maps, and the coast-line around Home bay is for the first time delineated. Many terraces, which Dr. Boas calls moraines, were met with in Northeastern Baffin land. His notes embrace all the phases of Eskimo life, their dialects and religion. The people of Baffin land are classed in seven divisions. These people always settle where there are extensive ice-plains.

AFRICA.—*Mr. Farini's Journey in the Kalahari*.—The July number of the *Proc. Roy. Geog. Society* contains an account of a recent journey in the Kalahari desert, by G. A. Farini. This desert forms the western portion of the new British protectorate of Bechuanaland, and has been but little explored. Its southern portion, immediately north of Griqua land, is occupied by half-breeds who suppressed or exterminated the Koranna Hottentots and received this land as a reward. Mr. Farini declares that the ordinary idea that all Bushmen are dwarfs is incorrect. Some that he met with were above the medium height. They live in caves, the walls of which are adorned with drawings. The sand-hills of the Southern Kalahari have their slopes covered with grass, but water is very scarce. The *sama*, a small gourd, is eaten by the oxen, and aids them to dispense with water for a considerable time. In the dry pans water can be obtained by digging. The Vaalpens obtain water by sucking a reed driven down some five feet below the surface. The water courses are dry, but are marked by a line of green. Wheat, sown in the rainy season,

will, at Kais on the course of the Molapo, mature in the dry season without irrigation. The Kattea are a nomadic tribe much like the Bushmen, but live in huts made of sticks set in a half circle, bent forward and covered with grass and milk-bush. The men are nude, the women clothed in a bit of skin. The Vaalpens are vassals of the Bechuanas, and in turn enslave the Kattea and Bushmen. The tribes on and bordering the desert practice circumcision at the age of sixteen, sometimes with fatal consequences.

Lehuhitung has a population of several hundred Bakalahari, a cross between Matabele and Bechuanas.

Near the Ochimbinde river, south of Lake Ngami, a thick forest was met with. Lake Ngami is becoming shallower every year on account (according to our traveler) of the gradual rising of the country. Griqua land is also rising. A tribe of dwarf Bushmen, called M'Kabbas, was found west of the lake. None exceeded four feet eight, and the women were as tall as the men. After reaching the watershed north of Lake Ngami, our traveler turned back, taking a more westerly route, but everywhere found the Kalahari not a barren waste but a sandy tract clothed to a large extent with grass and with k'gong trees (a species of mimosa) scattered about. The red sand at Mier is very fertile. Here are the headquarters of Dirk Vielandier, a half-breed who claims a large tract north of Koranna land. Mr. Farini reports the discovery of a variety of giraffe with white spots instead of dark, and much taller than the common kind.

While hunting, a huge elliptical walled enclosure of cyclopean masonry was found in about  $23\frac{1}{2}^{\circ}$  S. lat. and  $21\frac{1}{2}^{\circ}$  E. long. Basin-shaped ovals, sometimes formed out of one rock, sometimes composed of several, were regularly distributed every few yards round the ellipse. In the middle of the enclosure was a cross-shaped pavement of long narrow blocks, in the center of which was what seemed a base for a pedestal or monument. A broken column, with four flat fluted sides, was found, but no inscriptions could be discovered.

The falls of the Orange river, before pronounced inaccessible, were also visited by our traveler. The river is broken up at low water into many streams by projecting rocks, but in flood season many of these join into a sheet rivaling that of Niagara. At low water there are several smaller falls 350 feet high, and a main fall (the Hercules) 165 feet high.

The Kalahari is a plateau 3000 to 4000 feet above the sea, with an average summer heat of  $80^{\circ}$  during the day. The nights are cool. The average winter temperature is  $60^{\circ}$ . It is perfectly healthy for Europeans. In the discussion which followed, Mr. M. Kerr declared that Sr. Farini must have traversed the country at a propitious time after a rainfall.

*The Congo.*—The Rev. G. Grenfell continues to explore the Congo tributaries in the steam launch *Peace*. The Itimbiri was found to be navigable as far as the Lobi falls ( $23^{\circ} 21'$  E. long. and  $1^{\circ} 50'$  S. lat.). The Mbura divides into two at three or four miles from its junction with the Congo, and both branches are barred by rapids or falls, the southern one having a cascade forty feet high. The Lomami is a fine river with a tortuous channel and a swift current. In August, 1885, the Lulonga was ascended for nearly 700 miles. Its principal affluent is the Lopori, in  $1^{\circ} 12'$  N. lat. The Juapa and Bosira form Stanley's Black river, which enters near the equator. The Juapa was navigated for about three hundred miles, but hostile natives compelled the explorers to retreat before reaching the head of navigation. The Bosira was navigable for about two hundred miles. Mr. Grenfell dwells upon the richness of the Upper Congo basin.

Herr Wolff, a traveler in the service of the Congo Free State, has discovered an affluent of the Kassai likely to be of great future importance. This was ascended by the steamer *Vorwärts* in February and March to a distance of 430 leagues from its mouth, and one of its northern affluents brought the traveler to within a week's march of Nyangwe. There were no cataracts, and the stream might have been navigated still further had not the steamer met with an accident. By this route the great northern bend of the Congo, with its cataracts, can be avoided and an easy passage traced across Africa.

*African News.*—According to the observations of MM. G. Valdall and K. Knutson, the Rio del Rey, which forms the boundary between the English territory on the Niger and the German colony of the Cameroons, is not a river, but rather an estuary, the north-eastern arm of which is the Mene, while the northern arm is connected with the old Calabar river.—Father Duparquet, of the Péres du Saint-Esprit mission, has founded a station upon the plateau of Amboella, in  $15^{\circ} 8'$  S. lat. and  $16^{\circ} 14'$  E. long., at an altitude of 4540 feet, on the right bank of the Okashilanda, a tributary flowing into the Cunene on its left bank. M. Duparquet gives information about the Kuerahi and the Kavundu, which flow between the Cunene and the Okavango. The former of these two rivers, hitherto unknown to Europeans, crosses the territory of Evare, at the extremity of which it forms a lake.—Mr. Cope Whitehouse has, with the assistance of Herr Stadler, an engineer in the Egyptian service, thoroughly surveyed the Reian basin. The total area of the depression is estimated at 232 square miles, with a maximum depth of 280 feet below the Upper Nile. The possibility of utilizing these basins for storing the waters of the Nile seems to be interesting the Egyptian public. The Khedive has lent his aid to the enterprise, and General Scott-Moncrieff, Director of Public Works, proposes to estimate the cost of a canal from the basin to the

Nile.—M. A. Aubry has contributed to a recent issue of the *Revue Scientifique* an interesting account of his mission to Shoa. His description of the country is rose-color, but the ignorance of its inhabitants is darkly painted. The King believed that his visitor, being an engineer, could make a sword by putting some magic powder into the furnace along with the iron, a chief asked him for a charm against fire; and the people generally, seeing so many things that came from Europe, and not being acquainted with tools or processes, believe that all Europeans have a compact with the devil, and manufacture articles with their hands alone.

EUROPE.—*European News*.—There are, according to Professor Heim, 1155 glaciers in the Alps. Of these, 249 exceed 7500 meters in length. The total superficial area is more than 500 square miles. France has 144, Italy 78, Switzerland 471 and Austria 462. The Aletsch glacier, in Austria, is the longest. —From a discussion (St. Petersburg Society of Naturalists) upon the steppes of Russia as compared with those of Hungary and Spain, it appears that the steppes between the Pruth and the Don, like those of Hungary, support agriculture without irrigation, while those beyond the Don and the Volga are more truly Asiatic in character. The desiertos of Spain are more akin to the deserts of Africa than to the steppes of either Central Asia or Europe. The absence of forests was referred (1) to the salt-clays which covered them after their emergence from the sea; (2) to the ruminants which resorted to the steppes when grasses appeared, and (3) to the burning of the steppes by man.—The journey made to Cape North by Srs. Sommer and G. Cini, in January, 1885, is interesting as the first made across Lapland and Finland in midwinter for purely scientific purposes. The goal was reached from Magerö, the northernmost inhabited point, on foot, with comparative ease. Besides the eider and other water fowl, the raven, crow, magpie, Arctic fox and francolin (*Lagopus mutus*)—the last everywhere abundant—were seen. Much valuable information was collected on the Lapps, Quäns, and Northern Finns.—Recent soundings have given the following depths for the Swiss lakes: Constance, between Uttwyl and Friedrichshafen, 255 meters; Geneva, between Rivaz and Saint-Giugolphe, 256 meters; and between Lausanne and Evian, 330 meters; Lucerne, between Gerau and Lueteren, 214 meters; Brienne, 261 meters; Thun, 217; Zug, 198; Neuchatel, 153; Wallenstadt, 151; and Zurich, 143 meters.

#### GEOLOGY AND PALÆONTOLOGY.

THE PERMIAN IN NEBRASKA.—The question has been raised whether there is any true Permian formation in America, but pending its final solution I use the term provisionally to designate a group of strata found along the valley of the Blue river in Gage county,